

**What is claimed is:**

1. An isolated polypeptide comprising an amino acid sequence which has at least 70% identity to the amino acid sequence of SEQ ID NO:2 over the entire length of SEQ ID NO:2.

5

2. An isolated polypeptide as claimed in claim 1 in which the amino acid sequence has at least 95% identity.

3. The polypeptide as claimed in claim 1 comprising the amino acid sequence of SEQ ID NO:2.

10

4. The isolated polypeptide of SEQ ID NO:2.

5. An isolated polynucleotide comprising a nucleotide sequence encoding a polypeptide that has at least 70% identity to the amino acid sequence of SEQ ID NO:2, over the entire length of SEQ ID

15

NO:2; or a nucleotide sequence complementary to said isolated polynucleotide.

6. An isolated polynucleotide comprising a nucleotide sequence that has at least 70% identity to a nucleotide sequence encoding a polypeptide of SEQ ID NO:2, over the entire coding region; or a nucleotide sequence complementary to said isolated polynucleotide.

20

7. An isolated polynucleotide which comprises a nucleotide sequence which has at least 70% identity to that of SEQ ID NO:1 over the entire length of SEQ ID NO:1; or a nucleotide sequence complementary to said isolated polynucleotide.

25

8. The isolated polynucleotide as claimed in any one of claims 5 to 7 in which the identity is at least 95%.

9. An isolated polynucleotide selected from:

(a) a polynucleotide comprising a nucleotide sequence encoding the polypeptide of SEQ ID NO:2;

30

(b) the polynucleotide of SEQ ID NO:1; and

**RECEIVED**  
MAR 03 2003  
TECH CENTER 1600/2900

(c) a polynucleotide obtainable by screening an appropriate library under stringent hybridization conditions with a labeled probe having the sequence of SEQ ID NO:1 or a fragment thereof; .  
or a nucleotide sequence complementary to said isolated polynucleotide

5 10. An expression system comprising a polynucleotide capable of producing a polypeptide of claim 1 when said expression system is present in a compatible host cell.

11. A host cell comprising the expression system of claim 15 or a membrane thereof expressing the polypeptide of claim 1.

10

12. A process for producing a polypeptide of claim 1 comprising culturing a host cell of claim 11 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture medium.

15 13. An antibody immunospecific for the polypeptide of claim 1.

14. A method for screening to identify compounds which stimulate or which inhibit the function of the polypeptide of claim 1 which comprises a method selected from the group consisting of:

(a) measuring the binding of a candidate compound to the polypeptide (or to the cells or  
20 membranes bearing the polypeptide) or a fusion protein thereof by means of a label directly or indirectly associated with the candidate compound;

(b) measuring the binding of a candidate compound to the polypeptide (or to the cells or membranes bearing the polypeptide) or a fusion protein thereof in the presence of a labeled competitor;

25 (c) testing whether the candidate compound results in a signal generated by activation or inhibition of the polypeptide, using detection systems appropriate to the cells or cell membranes bearing the polypeptide;

(d) mixing a candidate compound with a solution containing a polypeptide of claim 1, to form a mixture, measuring activity of the polypeptide in the mixture, and comparing the activity of the  
30 mixture to a standard; or

(e) detecting the effect of a candidate compound on the production of mRNA encoding said polypeptide and said polypeptide in cells, using for instance, an ELISA assay.

15. An agonist or antagonist to the polypeptide of claims 1 to 4.

5

16. A compound which is:

(a) an agonist or antagonist to the polypeptide of claims 1 to 4;

(b) isolated polynucleotide of claims 5 to 9; or

(c) a nucleic acid molecule that modulates the expression of the nucleotide sequence encoding

10 the polypeptide of claim 1;

for use in therapy.

17. A process for diagnosing a disease or a susceptibility to a disease in an individual related to expression or activity of the polypeptide of claim 1 in an individual comprising:

15 (a) determining the presence or absence of a mutation in the nucleotide sequence encoding said polypeptide in the genome of said individual; and/or

(b) analyzing for the presence or amount of said polypeptide expression in a sample derived from said individual.